



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,942	04/16/2001	Takashi Shoji	Q61182	5374

7590 11/26/2002

SUGHRUE, MION, ZINN,  
MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER

HANNAHER, CONSTANTINE

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 11/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/834,942

Applicant(s)

SHOJI, TAKASHI

Examiner

Constantine Hannaher

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

## **DETAILED ACTION**

### **Information Disclosure Statement**

1. The information disclosure statement filed July 16, 2001 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

It is readily apparent that the Japanese documents 10-232824, 11-87922, and 11-242876 do not correspond to any other supplied reference.

### **Oath/Declaration**

2. Applicant has not supplied the postal code of 258-8538 for the mailing address identified under 37 CFR 1.63(c)(1).

### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 5/4, 5/2, 3, 5/3, and 5/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fender *et al.* (US005300784A) in view of Tonami *et al.* (JP 8-306328 A).

With respect to independent claim 1, Fender *et al.* discloses an imaging apparatus (Fig. 1) comprising a planar electrostatic recording material 1 which records image information (of x rays from source 3 passing through object 2) as an electrostatic latent image and which generates electric

currents in accordance with the electrostatic latent image when a read-out surface of the planar electrostatic recording material is scanned with a reading electromagnetic wave **7** (column 6, lines 17-46), and a flat plate-shaped substrate **11** which supports the planar electrostatic recording material **1** from a side of the read-out surface, and which has permeability (transparent, column 6, line 48) with respect to the reading electromagnetic wave. Fender *et al.* illustrates the imaging apparatus schematically and offers no disclosure regarding support of the material **1** or the substrate **11**, but clearly they must be supported above the source **5** and mirror **6** at a reliable distance from electrode **4**. Tonami *et al.* shows that in an imaging apparatus (Fig. 2), a planar electrostatic recording material **23** and flat plate-shaped substrate **22** is followed by a flat plate-shaped base plate **21** for the purpose of enhancing the mechanical strength. In view of the enhanced mechanical strength through the use of a base plate as suggested by Tonami *et al.*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Fender *et al.* to comprise a flat plate-shaped base plate for supporting the flat plate-shaped substrate **11** from a side opposite to the substrate surface with the recording material **1**. Higher rigidity and transparency is suggested the thicker glass plate of Tonami *et al.*

With respect to dependent claim 2, since the material for the base plate **21** and for the substrate **22** in the imaging apparatus of Tonami *et al.* is glass, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Fender *et al.* to comprise a base plate as suggested by Tonami *et al.* for mechanical strength of the same material as substrate **11** such that the coefficient of thermal expansion was approximately the same to avoid any difficulty with stress or curling or cracking and the like.

With respect to dependent claim 4, since the material for the base plate **21** and for the substrate **22** in the imaging apparatus of Tonami *et al.* is glass, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Fender *et al.* to comprise a base plate as suggested by Tonami *et al.* for mechanical strength of the same material as substrate 11 such that the refractive index was approximately the same to avoid any difficulty with reflections of the beam 7 at the interface between them.

With respect to dependent claims 5/4 and 5/2, Tonami *et al.* discloses that the surfaces of the base plate 21 and the substrate 22 which stand facing each other are adhered by an adhesive (bonding) agent 25.

With respect to dependent claim 3, since the material for the base plate 21 and for the substrate 22 in the imaging apparatus of Tonami *et al.* is glass, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus of Fender *et al.* to comprise a base plate as suggested by Tonami *et al.* for mechanical strength of the same material as substrate 11 such that the refractive index was approximately the same to avoid any difficulty with reflections of the beam 7 at the interface between them.

With respect to dependent claims 5/3 and 5/1, Tonami *et al.* discloses that the surfaces of the base plate 21 and the substrate 22 which stand facing each other are adhered by an adhesive (bonding) agent 25.

5. Claims 6/4, 6/2, 6/3, and 6/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fender *et al.* (US005300784A) and Tonami *et al.* (JP 8-306328 A) as applied to claims 4, 2, 3, and 1 above, and further in view of Letter (US003556787A).

With respect to dependent claims 6/4, 6/2, 6/3, and 6/1, Fender *et al.* and Tonami *et al.* do not suggest the presence of an anti-reflection coating layer. Nevertheless, an imaging apparatus comprising a planar electrostatic recording material and a flat plate-shaped substrate which also comprises an anti-reflection coating layer for improvement of the optical characteristics is known

from Letter (column 3, lines 55-59). In view of the improved optical characteristics described by Letter, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the imaging apparatus suggested by Fender *et al.* and Tonami *et al.* to further comprise the formation of an anti-reflection coating thereon. Formation on the light entry face of the base plate, where beam 7 would otherwise have an opportunity to reflect in view of the difference in refractive index between the air and the base plate 21 suggested by Tonami *et al.*, would not have taken more than ordinary skill in the art in view of the understood characteristics of such a coating layer.

**Response to Submission(s)**

6. This application has been published as US2001/0045536A1 on November 29, 2001.

**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Imai (US006376857B1) and Imai (US006268614B1) correspond to applications mentioned in the information disclosure statement filed July 16, 2001.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (703) 308-4850. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Art Unit: 2878

---

ch  
November 21, 2002

*Gr. Stanton*  
*LA NANTHAK*  
Senior Examiner  
Primary Examiner